

African Membracidae II

by

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As indicated in a previous paper (1952), the status of the genus *Platybelus* is far from clear, and it seems very desirable that the classification should be clarified and new genera erected to separate the diverse forms now included in the genus. A number of specimens have been examined from various sources which appear to form natural links between genera of the *Platybelinae*, and in two instances to be presently discussed, seem to provide bridges between the Subfamilies *CENTROTINAE* and *PLATYBELINAE*.

The material studied for the preparation of this paper and from which the figures have been drawn, is from the Musée du Congo Belge, Tervuren, the Naturhistorisches Museum, Vienna, the Institut Français d'Afrique Noire, Dakar, the Coryndon Museum, Nairobi, the South African Museum, Cape Town, and my own collection.

CENTROTINAE.

CENTROTINI.

Genus *Centruchus* Stål (1866).

This is a very little known genus and I have not been able to examine any of the species. I have therefore to rely on the published descriptions, which are for the most part inadequate, and on the photograph of the genotype *fuscipennis* (Germar) (1835), in forming my conception of the genus, in which I place the following new species.

***Centruchus solitarius* sp. n. (Figs. 25, 26, 27).**

Differing from all previously described species in its small size, being little more than half their size, and in its very short suprahumeral horns which are little more than carinae, and in the presence of two sub-basal cells in the tegmina.

Male. Head twice as wide as long; vertex subquadrate, blackish brown, sculptured, finely punctate, finely greyishly tomentose, shortly pilose with pale golden hairs, upper margin arcuate with a gibbosity above each ocellus, lower margin a little downwardly sloping, convex and a little upturned; clypeus

longer than wide, basally acutely lobate on each side, expanded and abruptly truncate at tip, rostrum reaching to intermediate coxae, antennae dark and about as long as the distance between the ocelli; postgenae, clypeus below and base of rostrum whitely tomentose.

Thorax. Pronotum blackish brown, finely punctate, shortly finely pilose with pale golden hairs, more or less finely greyishly tomentose; cephalic margin weakly marginate; metopidium almost vertical, convex, several small irregular obscure supraocular callosities; suprahumeral horns reduced to little more than carinae situated just above the humeral angles which are prominent and blunt extending a little beyond the eyes; posterior process extending horizontally from disc and contiguous with the scutellum, slightly ampliate and gibbous at its middle, thence tapering rapidly to its apex and deflexed following the line of the tegmina and extending half way along the margin of the fifth apical cell subtriangular in section with a lateral carina medially on each side, median carina strongly percurrent; tegmina about twice as long as wide, subhyaline, without pterostigma, veins dark brown and lightly tomentose, five apical, three subapical and two sub-basal cells, apical limbus rather narrow; hindwings with four apical cells; sides of thorax densely whitely tomentose; legs brown with tarsi and tibiae castaneous with pale golden hairs, the first joint of posterior tarsi scarcely longer than the second joint.

Scutellum wider than long, finely punctate and more or less tomentose particularly at basal angles and emarginate apex.

Abdomen greyish and sparsely punctate above, somewhat densely tomentose below.

Length 5.2 mm; width at suprahumeral horns 2.4 mm, at humeral angles 3.0 mm, at eyes 2.5 mm.

Holotype ♂, beaten from *Millettia caffra* Meisn., on the northern bank of the Umkomaas River, Natal, 19. Feb. 1953 (A. L. C.), in my collection.

The next two species, each the type of a new genus, must be placed in the Subfamily Centrotinae as they lack tegminal pterostigma, the characteristic of the Subfamily Platobelinae, and it seems that each of the two species can be considered as linking the two Subfamilies.

Platynotus gen. nov.

Near the genus *Centrotus* but differing in the highly arched posterior process, which is medially very strongly inwardly lobate. This genus appears to fall between *Centrotus* and the new genus to be presently described under the name of *Stalobelus*, and can therefore be considered as linking the tribes Centrotini and Platobelini.

Large robust species. Head wider than long, vertex subquadrate upper margin arcuate, lower margins downwardly sloping, eyes large and prominent, ocelli a little closer to the eyes than to each other and situated a little above the centro-ocular line, clypeus longer than wide, sublobate. Pronotum with a pair of robust divaricate suprahumeral horns, posterior process strongly

arched above scutellum, sometimes with a weak anterior node, medially inwardly expanded in an elongate swollen lobe and acuminate to the tip which extends beyond the inner angle of the tegmina; humeral angles prominent and subacute; tegmina about three times as long as wide, without pterostigma, with five apical and two subapical cells; hindwings with three apical cells; scutellum triangular with the apex roundedly emarginate.

Genotype *Platynotus lobatus* sp. n. (Figs. 1, 2, 3).

Female. Head wider than long, reddish-brown, finely punctate, sculptured, very shortly palely pilose; vertex subquadrate, upper margin arcuate and sinuate, lower margins downwardly sloping and weakly sinuate, slightly upturned, eyes large, prominent, sordid ochraceous; ocelli amber coloured, large, slightly raised, slightly closer to the eyes than to each other and situated a little above the centro-ocular line; clypeus longer than wide, declivous, sublobate on each side, shortly pilose, rostrum about reaching bases of posterior coxae; antennae ochraceous.

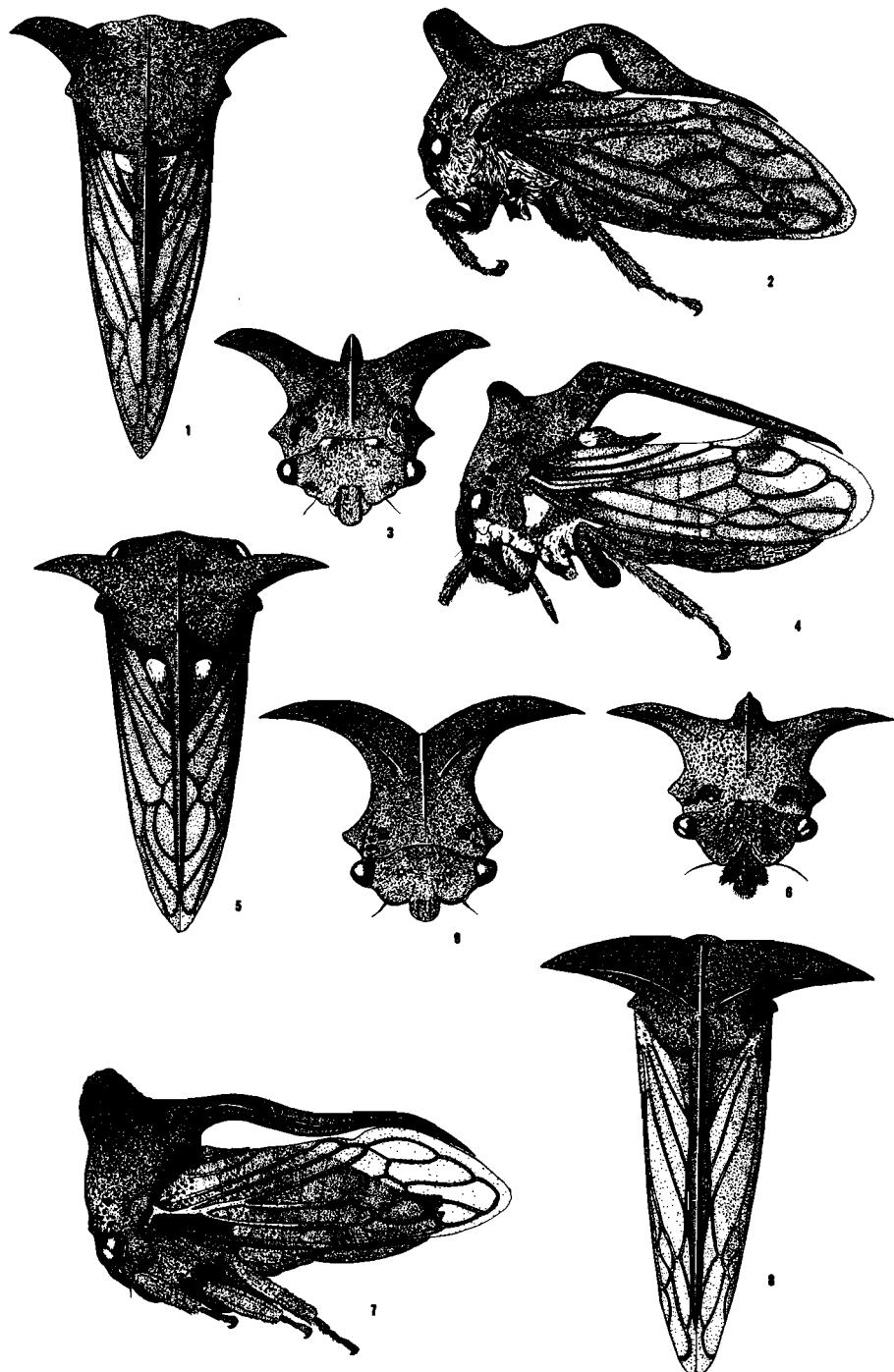
Thorax. Pronotum dark reddish brown, sculptured, finely punctate, a little granulate, shortly palely pilose; metopidium wider than high, a little backwardly sloping, with several bare supraocular callosities; suprathumeral horns robust, longer than the distance between their bases, extending upwards, outwards and forwards, strongly tricarinate, frontal margins backwardly curved, tips acute; posterior process rising from the posterior half of the pronotum in a rather high arch, somewhat slender basally expanding at the middle on its inner surface in an elongate swollen lobe where it impinges on the scutellum, laterally it is only slightly swollen, thence acuminate to its very sharp tip which extends, following the curve of the tegmina, a little more than half way along the margin of the fifth apical cell, weakly laterally carinate below, median carina strongly percurrent; humeral angles prominent and subacute; tegmina about three times as long as wide, brownish, subopaque, base coriaceous and punctate, sparsely pilose with pale hairs at base and on the dark brown veins, no pterostigma, five apical and two sub-apical cells, apical limbus moderately broad; hind wings with three apical cells; sides of thorax more or less densely creamily tomentose; legs dark brown with basal joints black, all joints with pale golden hairs, posterior tibiae weakly spined, first joint of posterior tarsi much longer than second.

Scutellum about as wide as long, dark brown, punctate, medially carinate, finely pilose with pale hairs, basal angles creamily tomentose, apex roundedly emarginate.

Abdomen dark brown above with posterior margins of tergites ochraceous; below almost black with more or less dense pale golden pilosity.

Length 7.5 mm.; width at tips of suprathumerales 4.5 mm., at humeral angles 2.8 mm., at eyes 2.4 mm.

Holotype ♀ taken by Grauer in N.W. Tanganyika, 1910, in collection Nat. Mus. Vienna.



LEPTOCENTRINI.

Leptoceps gen. nov.

This genus closely resembles *Tricoceps* but has no tegminal pterostigma. It is also close to *Leptocentrus* and may therefore be considered as a further link between the Subfamilies Centrotinae and Platybelinae.

Head wider than long, vertex subquadrate, upper margin a little arcute, lower margins downwardly sloping; eyes large; ocelli about as far from each other as from the eyes and situated slightly above the centro-ocular line; clypeus longer than wide, lobate. Pronotum with a pair of strong divaricate suprähumerale horns; posterior process basally robust, rising well above the disc then declivous and acuminate to tip which extends beyond the angle of the tegmina; humeral angles prominent and blunt; tegmina about three times as long as wide, without pterostigma, with five apical and two subapical cells; hindwings with four apical cells. Scutellum triangular, wider than long, tip emarginate.

Genotype **Leptoceps vinculum** sp. n. (Figs. 4, 5, 6).

Female. Head wider than long; vertex subquadrate, black, lightly sculptured, finely punctate, with pale golden pubescence, upper margin a little arcuate and weakly sinuous, lower margins rather steeply downwardly sloping and rounded; eyes large, sordid ochraceous; ocelli pale amber, about as far from each other as from the eyes and situated slightly above the centro-ocular line; clypeus vertical, longer than wide, somewhat angularly lobate at base, rostrum about reaching posterior coxae; antennae long, castaneous.

Thorax. Pronotum black, shining, deeply punctate, sparsely pilose with short pale golden hairs; metopidium wider than high, slightly backwardly sloping, with several bare shining supraocular callosities; suprähumerale horns about as long as the distance between their bases, extending outwards and a little upwards, laterally carinate with a short weak carina above, frontal margins slightly backwardly curved, apices slightly decurved; posterior process basally robust, rising well above the disc of the pronotum, elbowed above the base of the scutellum, straight and declivous, impinging on the inner tegminal angle and extending as far as the tip of the abdomen, strongly tricarinate, extreme tip decurved, median carina percurrent; humeral angles prominent and blunt; tegmina pale amber hyaline, slightly wrinkled, about three times as long as wide, base black, punctate and sparsely pilose with pale golden hairs, veins

PLATE I	Fig.	1. <i>Platynotus lobatus</i> gen. et. sp. n.	♀	Dorsal view
	2.	" "	♀	Lateral "
	3.	" "	♀	Frontal "
	4.	<i>Leptoceps vinculum</i>	♀	Lateral "
	5.	" "	♀	Dorsal "
	6.	" "	♀	Frontal "
	7.	<i>Cornutobelus tenebrosus</i>	♀	Lateral "
	8.	" "	♀	Dorsal "
	9.	" "	♀	Frontal "

thick and dark brown, without pterostigma, a dark brown macula at the inner angle, five apical and two subapical cells; hindwings with four apical cells; sides of thorax more or less densely pilose.

Scutellum wider than long, black, punctate, shortly pilose, with a tuft of long hairs at the basal angles, tip upturned, roundedly emarginate, apices acute.

Abdomen greyish and deeply sparsely punctate above, black with silvery pubescence below.

Length 6.75 mm.; width across suprathumeral horns 5 mm., at humeral angles 2.6 mm., at eyes 2.4 mm.

Male as female but posterior process less declivous and not impinging on tegmina. Length 6.25 mm.; width across suprathumeral horns 4.1 mm., at humeral angles 2.25 mm., at eyes 2.2 mm.

Holotype ♀, allotype ♂ and 2 male paratypes from Ugano, 15—1700 m., Matengo-Hochland, wsw. von Songea, Tanganyika, 11—31 Dec. 1935 and 1—8 April 1936, H. Zerny.

Holotype, allotype and 1 ♂ paratype in Nat. Mus. Vienna; 1 ♂ paratype in my collection.

PLATYBELINAE.

PLATYBELINI.

Genus *Platybelus* Stål (1866).

This genus as it now stands, contains 21 species, as follows: *africanus* Distant (1916), *albescens* Funkhouser (1927), *aries* Jacobi (1910), *brunneus* Funkh. (1934), *colladoi* (Pelaez) (1935), *dschagga* Jac. (1910), *escaleranus* Dist. (1916), *flavus* (Signoret) (1858), *globifer* (Pelz.) (1935), *gowdeyi* Dist. (1916), *insignis* Dist. (1916), *luteus* Funkh. (1914), *macrocerus* Pelz. (1936), *mutabilis* Capener (1951), *nodulatus* (Pelz.) (1935), *projectus* Funkh. (1936), *sericeus* Capener (1951), *serpentarius* (Buckton) (1905), *sinuosus* Dist. (1916), *tanganensis* (Buckt.) (1903), and *tenuispina* (Pelz.) (1935).

That so many varied forms should fall into one genus only makes for confusion, and I now attempt to sort them into groups of similar species and erect new genera to accommodate them.

Since so much confusion exists regarding the genus *Platybelus* I have prepared a new description, based on a specimen of the genotype *P. flavus* (Sign.) in the collection of the Musée du Congo Belge, as follows:

Medium sized to rather large, with strong, somewhat foliate suprathumeral horns and a sinuate acuminate posterior process.

Head wider than long; vertex subquadrate, upper margin arcuate and a little sinuate, lower margins downwardly sloping and more or less rounded, eyes prominent, large, ocelli large, about as far from each other as from the eyes and situated very slightly above the centro-ocular line; clypeus about as long as wide, rounded, without basal lobes, extending about two-thirds its

length below the lower margins of the vertex. *Thorax.* Pronotum bearing a pair of strong suprhumeral horns which are long, somewhat foliate and usually dorso-ventrally compressed; posterior process robust at base, sinuous, usually slightly but sometimes strongly raised above the scutellum, then impinging on the tegmina, tectiform, tricarinate, acuminate and sinuous to tip which extends beyond the inner angle of the tegmina; tegmina inclined to variation and the presence of spurious veins, but usually with five apical and two or three subapical cells, apical limbus broad; hindwings with three apical cells.

Genotype *Platybelus flavus* (Sign.) (Figs. 10, 11, 12).

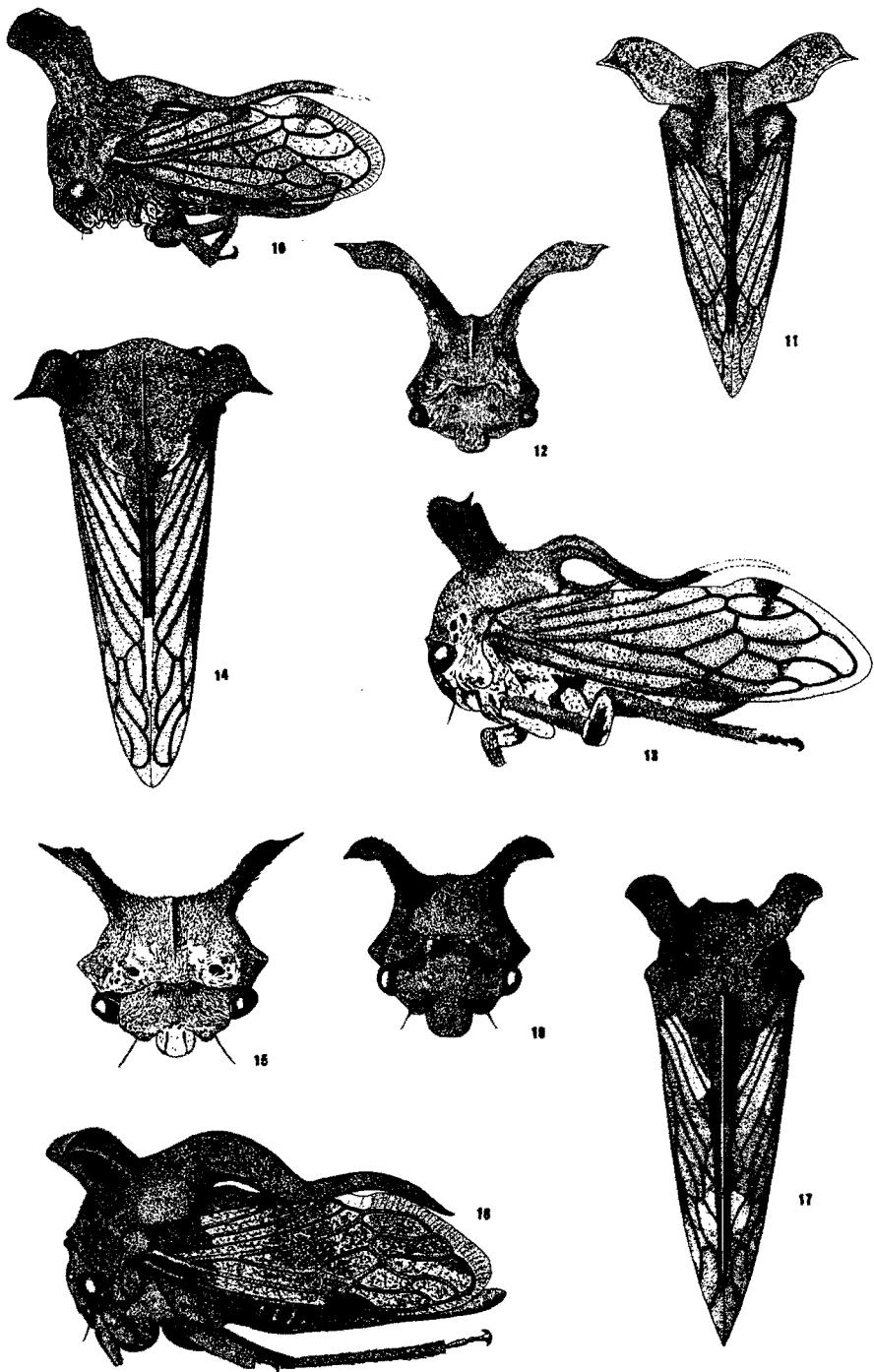
First described by Signoret as *Centrotus flavus*. Medium sized, fulvous, rather densely pilose with pale hairs, finely punctate, suprhumeral horns long, strongly outwardly curved, posterior process strongly sinuous, tegmina wrinkled hyaline.

Female. Head wider than long; vertex subquadrate, rather densely pilose with pale hairs, finely punctate, sculptured, upper margin arcuate and sinuous, slightly swollen above each ocellus, lower margins downwardly sloping and a little sinuous; eyes ochraceous spotted with pale brown, large, a little oblique; ocelli large, ochraceous, a little raised, slightly closer to the eyes than to each other and situated very slightly above the centro-ocular line; clypeus declivous, about as broad as long, rounded, rostrum reaching just beyond bases of posterior coxae; antennae ochraceous.

Thorax. Pronotum fulvous, pilose with pale hairs, finely punctate, sculptured; metopidium almost vertical, several bare supreocular callosities; suprhumeral horns long, directed upwards, outwards and little forwards, broad at base, foliate, dorso-ventrally compressed and decurved, dorsal surface a little granulate, marginally carinate, apices acute, lower part of posterior carina serrate, a carina on the under surface almost directly below the posterior carina and extending somewhat weakly almost to the base of the scutellum; posterior process moderately robust at base, a little arched over scutellum with the ventral surface only a little distant from it and impinging on its apex, thence acuminate and sinuous, contiguous with the tegmina and extending a little beyond the margin of the fifth apical cell of the tegmina; humeral angles prominent and blunt; tegmina about two and a half times as long as broad, hyaline, a little wrinkled, base coriaceous, punctate and sparsely pilose, veins brown, basally sparsely pilose, pterostigma large, coriaceous and sparsely pilose, five apical and three subapical cells, apical limbus broad; legs simple, pale brown to fulvous, posterior tibiae weakly spined, posterior tarsi with basal joint more than twice as long as second joint.

Scutellum broader than long, fulvous, punctate, pilose, tip slightly upturned and emarginate.

Abdomen greyish and deeply punctate above, greyishly pilose below. Length, head to tip of tegmina 5.5 mm., from apex of suprumerals to



tip of tegmina 7 mm.; width across tips of suprhumerals 4.5 mm., across humeral angles 3.3 mm., at eyes 2.2 mm. Described and figured from a specimen in the collection of Musée du Congo Belge, collected by Ch. Scops at Mahagi-Niarembe, Belgian Congo, Sept. 1935.

Of the twenty other species listed above, only *luteus* Funkh. can remain in this genus, and it is very questionable whether this species is correctly placed, as it was taken at Banguey Is., East Indies. However, Funkhouser did not figure it and it was one of his earliest descriptions and somewhat vague, so that the species must remain in this genus until more light can be shed on it.

I now have pleasure in adding a species, bringing the total to three.

Platybelus flagellatus sp. n. (Figs. 13, 14, 15).

Resembling *P. flavus* (Sign.) in the shape of the suprhumeral horns, but larger, darker in colour, with the posterior process very slender and strongly arched over the scutellum, and with two instead of three subapical cells in the tegmina. Large, dark brown, more or less densely tomentose, on sides and below, suprhumeral horns foliate with acute apices, posterior process slender and strongly arched above the scutellum, tegmina hyaline.

Female. Head about three times as wide as long; vertex subquadrate, dark brown, strongly sculptured, finely punctate, shortly pilose with golden hairs, upper margin arcuate and strongly sinuate, lower margins downwardly sloping, strongly sinuate and marginally somewhat upturned, just above this margin somewhat whitely tomentose; eyes sordid ochraceous, prominent, elongate and a little oblique; ecelli amber coloured and a little raised, about as far from each other as from the eyes and situated about on the centro-ocular line; clypeus about as broad as long, rounded and clearly sulcate on each side, rostrum about reaching to bases of posterior coxae, postgenae more or less densely whitely tomentose.

Thorax. Pronotum dark brown shading to reddish brown below the suprhumerals and at the humeral angles, finely punctate, rather shortly pilose with golden hairs and a little tomentose round the supraocular callosities on the metopidium and adjacent to the basal angles of the scutellum; metopidium convex, slightly backwardly sloping, with several bare supraocular callosities; suprhumeral horns longer than the distance between their bases, extending upwards, outwards and forwards, foliate with the apices strongly acute,

PLATE II Fig.	10.	<i>Platybelus flavus</i> (Signoret)	♀	Lateral view
11.	"	"	♀	Dorsal "
12.	"	"	♀	Frontal "
13.	<i>Platybelus flagellatus</i> sp. n.		♀	Lateral "
14.	"	"	♀	Dorsal "
15.	"	"	♀	Frontal "
16.	<i>Matonotus granulatus</i> gen. et. sp. n.		♀	Lateral "
17.	"	"	♀	Dorsal "
18.	"	"	♀	Frontal "

marginally carinate with a carina below from the apex running close to the posterior margin to the base; posterior process slender and very strongly sinuate, strongly arched above the scutellum and impinging on its apex, extending to well beyond the inner angles of the tegmina (but damaged in the type specimen), tricarinate and shortly pilose; median carina percurrent; humeral angles blunt, extending beyond the eyes; tegmina about three times as long as wide, hyaline, basally dark brown and obscurely coriaceous with short golden hairs, veins dark brown with golden hairs, a dark brown macula at the inner angle extending across the fifth apical cell, five apical and two subapical cells, apical limbus moderately broad; sides of thorax more or less densely tomentose; legs simple, basal joints dark brown and whitely tomentose, tibiae and tarsi dark brown.

Scutellum about as wide as long, punctate, pilose with golden hairs, a little tomentose at basal angles, tip upturned and emarginate forming a cradle for the posterior process.

Abdomen above, brown except basal segment which is grey, sparsely deeply punctate; below more or less densely tomentose.

Length, head to tips of tegmina 7.3 mm; width across tips of suprhumerales 4.3 mm., across humeral angles 2.9 mm. at eyes 2.7 mm.

Holotype ♀, Dekeyser, Lepesme and Villiers at Mioko, Fernando-Poo, 1,700 to 2,000 m.; 8.XII.51, in collection Institut Français d'Afrique Noire at Dakar.

Matonotus gen. nov.

Near *Platybelus* but differing chiefly in the more quadrate vertex, the much longer rostrum, the more robust suprhumeral horns and posterior process, and the long ovipositor.

Head wider than long; vertex subquadrate, upper margin very strongly arcuate and sinuate, a tuberculate swelling above each ocellus, lower margins downwardly sloping and convex; eyes large; ocelli large, prominent, about as far from each other as from the eyes and situated very slightly above the centro-ocular line; clypeus broadly rounded without lobes, about as wide as long, rostrum extending almost to base of ovipositor. *Thorax*. *Pronotum* with metopidium wider than high, a little backwardly sloping; suprhumeral horns robust, somewhat dorso-ventrally compressed, directed upwards, forwards and outwards; posterior process very robust, arched above and impinging on apex of scutellum, tectiform, sinuate and acuminate to tip, which extends beyond inner angle of tegmina; humeral angles prominent and blunt; tegmina with five apical and two subapical cells. *Scutellum* about as wide as long, narrowly emarginate at apex. *Abdomen* of female with long ovipositor. Genotype the following new species:

Matonotus granulatus sp. n. (Figs. 16, 17, 18).

Female. *Head* wider than long, dark chocolate-brown; vertex subquadrate, finely punctate, palely sparsely very shortly pilose, sculptured, upper

margin very strongly arcuate and sinuate with a strong tuberculate swelling above each ocellus, lower margins sloping downwards strongly convex and a little sinuate; eyes large, prominent, ochraceous; ocelli large, prominent, amber coloured, about as far from each other as from the eyes and situated very slightly above the centro-ocular line; clypeus broadly rounded, not lobate, about as wide as long, rostrum reaching almost to the base of the ovipositor; antennae stout, ochraceous.

Thorax. *Pronotum* dark chocolate-brown, finely punctate, granulate, palely very shortly pilose on the metopidium, roughly sculptured; metopidium wider than high, a little backwardly sloping with several somewhat obscure supraocular callosities; suprahumeral horns broad, longer than the distance between their bases, somewhat dorso-ventrally compressed, directed upwards forwards and outwards, tips somewhat foliate and decurved, apices subacute, marginally carinate, a weak carina below caudad of central line; posterior process very robust at base, rising from the posterior half of the disc, very slightly raised above the scutellum, strongly arched and impinging on apex of scutellum, tectiform, tricarinate, sinuate and acuminate to tip which reaches the middle of the margin of the fourth apical cell of the tegmina; humeral angles prominent, subacute; tegmina subopaque, about three times as long as wide, wrinkled, base brown, coriaceous, punctate, veins brown, pterostigma well developed, brown, coriaceous, a broad brown fascia across the middle third and another from the anal angle to the third apical cell, five apical, two subapical cells, apical limbus broad and wrinkled; legs simple, dark brown.

Scutellum a little wider than long, dark brown, punctate, a little gibbous at base, narrowly emarginate at apex.

Abdomen dark brown, posterior margins of tergites paler, below very shortly palely pilose ovipositor extending beyond the apex of the tegmina.

Holotype ♀ collected by Dr. Ch. Seydel at Mato, 25.XI.25, in my collection.

Cornutobelus gen. nov.

Near *Platybelus* but differing chiefly in the strong, robust, acute suprahumeral horns.

Head. much wider than long; vertex subquadrate, upper margin arcuate and a little sinuate, lower margins downwardly sloping and a little convex; eyes prominent; ocelli usually a little closer to the eyes than to each other and situated a little above the centro-ocular line; clypeus longer than broad, strongly declivous, tip rounded, rostrum about reaching to posterior coxae.

Thorax. *Pronotum* with metopidium almost vertical, at least as wide as high; suprahumeral horns robust, broad at base, acuminate to tip, directed upwards and outwards; posterior process robust, sinuous, usually raised above the scutellum but sometimes almost contiguous with it and the margins of the tegmina; humeral angles blunt and prominent; tegmina with elongate pterostigma, five apical and two subapical cells.

Genotype *mutabilis* (Capener 1951).

In this genus must also be placed the following species: *macrocerus* Pelaez (1936), *tanganensis* (Buckton 1903), and *Centrotus alticornis* Jacobi, (1910), which will be more fully discussed when dealing with the genus *Spalirises* Distant (1916). To these I have pleasure in adding the following new species:

Cornutobelus tenebrosus sp. n. (Figs. 7, 8, 9).

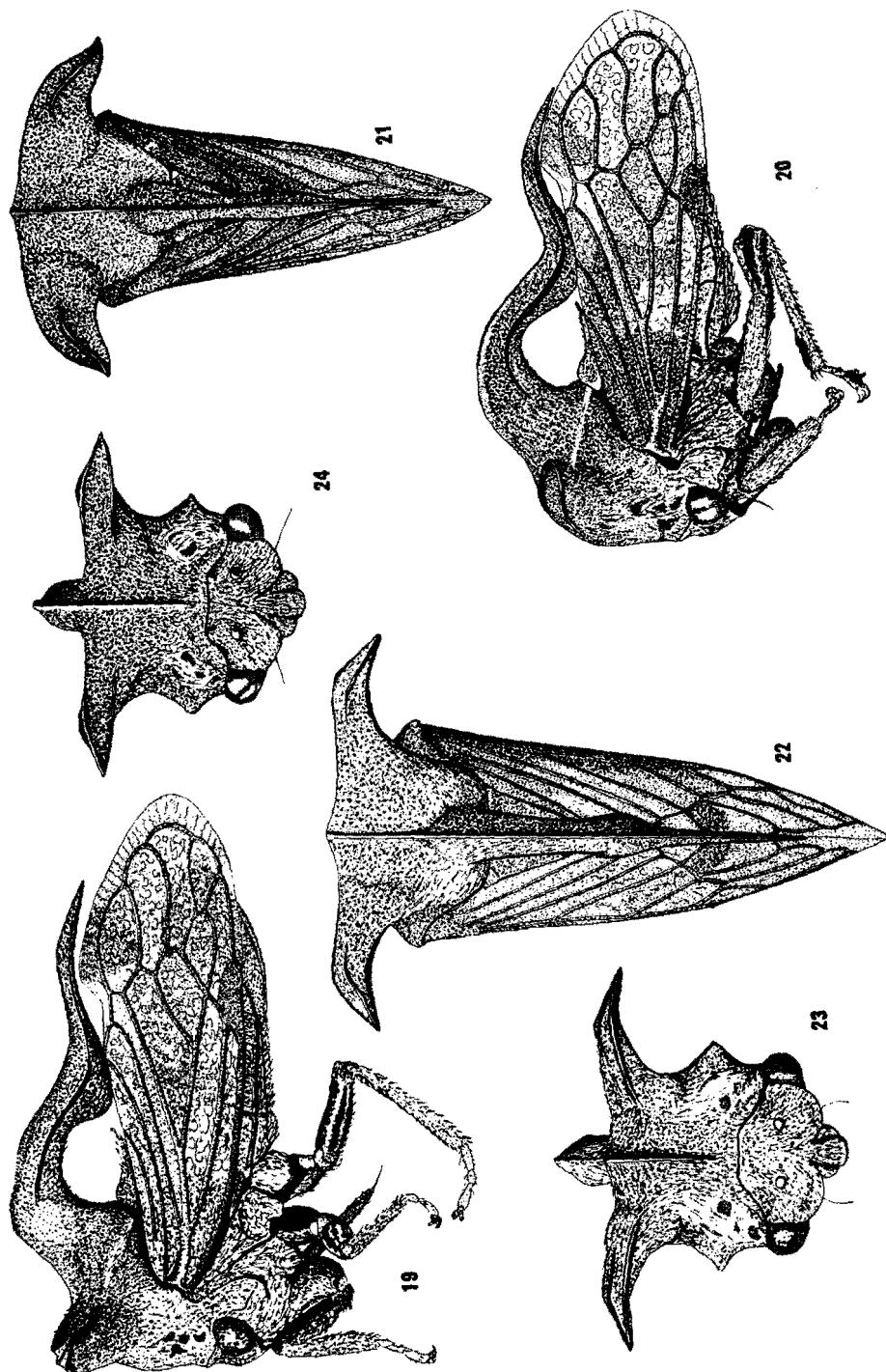
Female. Head wider than long; vertex subquadrate, black, finely punctate and shortly goldenly pilose, upper margin arcuate and a little sinuate, lower margins downwardly sloping convex and a little sinuous with the frontal margin a little upturned; eyes sordid ochraceous, large, prominent; ocelli pale amber, large, a little raised, a little closer to each other than to the eyes and situated very slightly above the centro-ocular line; clypeus longer than wide, declivous, tip rounded, rostrum barely extending to posterior coxae; antennae ochraceous.

Thorax. Pronotum piceous-brown, finely granulate and punctate with short golden hairs; metopidium almost vertical, as high as wide, with several bare supraocular callosities; suprakular horns very broad at base and robust to the acute tips, basally almost touching, separated by the median carina, rising upwards and outwards with the tips a little decurved, strongly tricarinate strongly curved and a little backwardly inclined; posterior process rising more or less horizontally from the disc, more or less uniform in diameter as far as the middle where it is very slightly laterally ampliate, sinuous and strongly tricarinate, beyond the middle acuminate to the tip which reaches almost as far as the margin of the fourth apical cell of the tegmina and passes the tip of the abdomen; humeral angles blunt and prominent; tegmina about three times as long as wide, pale amber hyaline, basally very narrowly dark brown and punctate, then ochraceously coriaceous and punctate, veins ochraceous basally shading to brown, pterostigma elongate, brownish coriaceous with sparse short pale hairs, five apical and two subapical cells, limbus moderately broad; hind wings with three apical cells; legs simple, brown, anterior and intermediate tibiae somewhat flattened, posterior tibiae finely spinose, posterior tarsi with first joint much longer than second joint.

Scutellum about as wide as long, piceous-brown, punctate and shortly palely pilose.

Abdomen pale brown and punctate above, dark brown and shortly palely pilose below.

PLATE III Fig. 19. <i>Stalobelus africanus</i> Distant				♀ Lateral view
20.	"	"	"	♂ Lateral "
21.	"	"	"	♀ Dorsal "
22.	"	"	"	♂ Dorsal "
23.	"	"	"	♀ Frontal "
24.	"	"	"	♂ Frontal "



Length 7 mm.; width across tips of suprhumerales 5.25 mm., at humeral angles 2.6 mm., at eyes 2.3 mm.

Holotype ♀, collected by R. Grauer in the forest district of Urwald-Moera, Eastern Congo, N.W. of Lake Tanganyika. In the collection of the Nat. Mus. Vienna. Three ♀ paratypes from the Belgian Congo: Bassin Lukuga, 1936, De Saeger; Haut-Uélé: Moto, 1922, L. Burgeon and Disbo (Likini) 10. X. 22, A. Collart, in the collection of the Musée du Congo Belge.

Stalobelus gen. nov.

This genus is near *Cornutobelus*, but differs chiefly in the strongly arched sinuous posterior process, which usually has a more or less well developed medial swelling.

Head wider than long; vertex subquadrate, sculptured, upper margin arcuate and sinuate, lower margins a little downwardly sloping and convex; eyes large and prominent; ocelli large, a little raised, a little closer to the eyes than to each other and situated above the centro-ocular line, clypeus a little declivous, about as wide as long, clearly sulcate and a little lobate on each side, rostrum reaching to posterior coxae. *Thorax*. *Pronotum* armed with a pair of strong suprhumeral horns, usually shorter and more robust in the males, with the apices acute and not foliate as in those of *Platybelus*; metopidium vertical and convex; posterior process robust at base rising in a strong arch above the scutellum then declivous and usually strongly globose inferiorly, almost or quite touching the apex of the scutellum, thence acuminate and sinuous to the tip which passes the inner angle of the tegmina; median carina percurrent; humeral angles prominent and blunt; tegmina about two and a half times as long as wide, with a well developed pterostigma, with five apical and two subapical cells; hindwings with three apical cells; legs simple, posterior tarsi with basal joints at least twice as long as second joint. Scutellum about as long as wide, emarginate at tip.

Genotype *africanus* Distant (1916).

Stalobelus africanus (Dist.) (Figs. 19 to 24).

Female. *Head* wider than long; vertex subquadrate, sculptured, dark brown, finely punctate, more or less densely pilose with pale golden hairs, upper margin arcuate and sinuate, lower margins a little downwardly sloping and convex; eyes large, prominent and a little oblique; ocelli large, amber coloured and a little raised, situated as in generic description; clypeus about as wide as long, clearly sulcate and a little lobate on each side; antennae ochraceous.

Thorax. *Pronotum* rather dark brown, sculptured, rather finely punctate, more or less densely pilose with pale golden hairs which are less dense on the posterior process, with a streak of paler hairs from the bases of the suprhumeral horns to the basal angles of the scutellum; metopidium almost vertical and a little convex with several bare supraocular callosities; suprhumeral horns robust and acuminate, directed outwards and

very slightly upwards, with the tips a little decurved, marginally strongly carinate with a short median carina above and a longer one below, tips sharp and a little backwardly curved; posterior process robust, rising from the posterior half of the disc in a strong arch, declivous and inferiorly globate just beyond the apex of the scutellum, thence sinuous to tip which extends as far as the apex of the abdomen, tricarinate, median carina strongly percurrent; humeral angles prominent and blunt; tegmina almost three times as long as wide, apical area pale amber, a clear fascia from the pterostigma to the anal angle and a sub-basal one, between these a darker band and another at the anal angle, base coriaceous and punctate, veins strong and pilose, five apical and two subapical cells; legs simple, basal joints black, tarsi fulvous, tibiae brown.

Scutellum about as broad as long, finely punctate and pilose, basally narrowly whitely tomentose, tip very slightly upturned and emarginate.

Abdomen greyish above, deeply punctate, below brown and more or less longly pilose with pale golden hairs.

Length 6.5 mm.; width at tips of suprahumeral horns 4.3 mm., at humeral angles 2.5 mm., at eyes 2.2 mm.

Male differing from the female in its darker colour, shorter pilosity, shorter and more robust suprahumeral horns which are almost horizontal, inferior lobe of the posterior process a little less ampliate.

Length 6 mm.; width at tips of suprahumeral horns 3.7 mm., at humeral angles 2.3 mm., at eyes 2.1 mm.

Described from specimens collected at Rutshuru, Belgian Congo in April 1937 by Miss Prophylactique, in the collection of the Musée du Congo Belge.

In this genus must be placed the following species: *albescens* (Funkh.), *colladoi* (Pelaez), *escalieranus* (Dist.), *globifer* (Pelaez), *gowdeyi* (Dist.), *insignis* (Dist.), *nodulatus* (Pelaez), *serpentarius* (Buckton), *sinuosus* (Dist.), and *tenuispina* (Pelaez).

It seems probable that Buckton's *serpentarius* is the same species as the genotype *africanus*, but as Buckton's type, which was lodged in the Madrid Museum, appears to have been destroyed or lost, we have now no means of discovering the truth.

Distantobelus gen. nov.

This genus is allied to *Platybelus*, differing chiefly in the shape of the suprahumeral horns, which in the males are sometimes obsolete. So far as is known the sexes are dimorphic, the females having more or less well developed suprahumeral horns which are much reduced or entirely absent in the males.

Head wider than long; vertex subquadrate, upper margin a little arcuate and sinuous, lower margins downwardly sloping and a little convex; eyes moderately large; ocelli a little nearer to the eyes than to each other and situated very slightly above the centro-ocular line; clypeus longer than broad,

longitudinally sulcate on each side forming weak lobes. *Thorax*. *Pronotum* in the females bearing a pair of suprakular horns which may be as long as the distance between their bases or little more than ear-like processes, in the males, in some cases being merely carina or absent altogether; posterior process a little arched over the scutellum and sinuous to the apex which reaches beyond the inner angle of the tegmina; humeral angles sub-prominent and blunt; tegmina about twice as long as broad, tips rounded, venation inclined to variation with the occurrence of spurious veins, but usually with five apical and three subapical cells, and with a well developed pterostigma; wings with three apical cells; legs simple; scutellum wider than long.

Genotype sericeous (Capener) (1951) (Fig. 33).

Distantobelus brunneus (Funkh.) (1934).

This species which Funkhouser placed in *Platybelus*, must now be placed in this genus. It has been unrecorded since it was discovered in Dec. 1929 at Roodekuil, near Warmbaths, Tvl., by Dr. H. K. Munro, until Dec. 1953 when I took a good series from small *Acacia* bushes by beating, at Middelfontein, 10 miles north of Nylstroom. Females were more abundant than males (as so often seems to be the case with Membracidae) by about four to one. Several nymphs were also taken so I am now able to describe and figure it.

Nymph, Last Instar. (Figs. 31, 32).

Head and pronotum pale green, meso- and metathorax and abdomen dark brown.

Head subquadrate, pale green, whitely pilose with the hairs arising from small tubercles; vertex with arcuate upper margin and lower margins subhorizontal extending outwards below the eyes about half the width of the eyes; eyes greenish ochraceous; ocelli obscure, sunken, closer to each other than to the eyes and situated very slightly below the centro-ocular line; a slight swelling on the upper margin above each ocellus, vertically centrally carinate; clypeus frontally obscured by the longer pilosity of the lower margin, below pale green and very shortly pilose, rostrum extending to base of posterior coxae. *Thorax*. *Pronotum* pale green, palely tuberculately pilose, sculptured, frontally with a prominent pilose tubercle either side of the somewhat obscure central carina; metopidium backwardly sloping and rising in a helmet-like crest which is extended backwards over about two-thirds of the mesonotum in a subacute process; suprakular buds moderately well developed, a dark brown fascia extending from the base of the posterior process to the crest; meso- and metanotum dark brown and shortly whitely pilose as are the wing sheaths, segmentation obscure; legs subtriangular in section, pilose, pale green mottled with brown, posterior tibiae dark brown.

Abdomen dark brown with white pilosity, seven visible segments and anal tube, a row of strongly tuberculate hairs occurring on each segment either side of the median line and another series of similar hairs about midway

between these and the lateral margin; laterally on each of the last six visible segments a rather longly pilose lamella, anal tube lighter brown and about as long as the other abdominal segments together, inner extensible tube jet black; underside pale green with short white hairs along the pleurae.

Length from head to tip of anal tube 4.75 mm; height from lateral margin of prosternum to dorsal crest 2 mm.

Anchonobelus gen. nov.

This genus appears to link *Platybelus* with *Anchon*. It differs from *Platybelus* in the highly arched posterior process and from *Anchon* in the strongly sinuous form of this appendage.

Head more than twice as wide as long; vertex subquadrate, upper margin arcuate and sinuous, lower margins convex and a little downwardly sloping; eyes large, prominent; ocelli conspicuous, a little closer to the eyes than to each other and situated above the centro-ocular line; clypeus a little longer than broad, declivous, sulcate on each side, tip rounded, rostrum about reaching to posterior coxae. *Thorax*. Pronotum with metopidium almost vertical, suprakhumeral horns rather broad at base, dorso-ventrally compressed, extending outwards and upwards, tips a little foliate with apices acute; posterior process robust at base rising at right angles to the posterior half of the disc, with a short anterior process then directed backwards in a strongly sinuate process well beyond the inner angles of the tegmina; humeral angles prominent and blunt; tegmina about three times as long as broad, pterostigma large and ovate, with five apical and usually two subapical cells, apical limbus moderately broad; hind wings with three apical cells; legs simple; scutellum about as broad as long, apex narrowly emarginate.

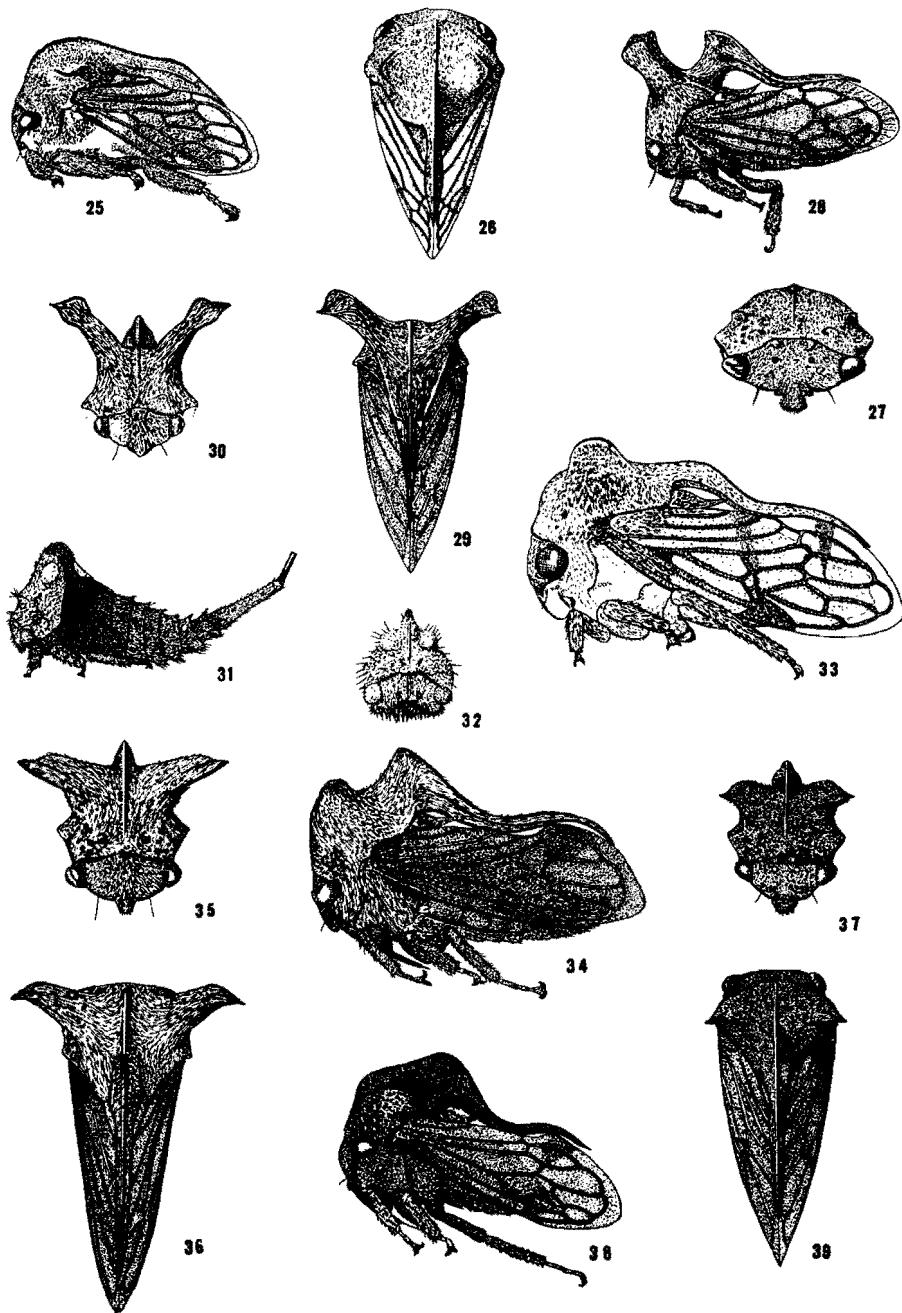
Genotype *aries* Jacobi (1910). (Figs. 28, 29, 30). Jacobi's other species *dschagga* (1910) also belongs to this genus.

Genus *Spalirises* Distant (1916).

In 1910 Jacobi published a description of a new species *Centrotus alticornis* from two specimens, the type from Meru which was placed in the Stockholm Museum, and a paratype from Usambara which he kept in his own collection and which was eventually lodged in the Dresden Museum.

The following year (1911) he received a further specimen from Ruwenzori which he described and figured ("a") as a variation, at the same time figuring the specimen from Usambara ("b, c"). Through the kindness and co-operation of the British Museum, and particularly of Mr. R. J. Izzard, I have obtained excellent photographs of the Meru and Usambara specimens, which I consider to be distinct species, but until more material can be studied they must both be treated as true *alticornis*, and placed in the new genus *Cornutobelus*, as previously indicated. Goding's *humilis* (1930) must be regarded as a synonym.

Distant (1916), realising that the species represented by Jacobi as "a",



was not the true *alticornis*, selected it as the genotype of his new genus *Spalirises*, retaining the name *alticornis* as its specific name.

I have indicated before (1952b) that *Tricoceps rugosa* Funkh. (1927) should be placed in *Spalirises*, and it now appears that this was fully justified, for I have now been able to study a large amount of material from Central Africa and I have no hesitation in pronouncing *rugosa* (Figs. 37, 38, 39) to be the male of *Spalirises alticornis*. Specimens of the form *alticornis* have proved to be all females (Figs. 34, 35, 36) while those of the *rugosa* form are all males.

The genus *Spalirises* therefore, as it now stands, contains but one species, *S.alticornis* Jacobi, *S.rugosa* (Funkh.) being a synonym.

In his last work (1952) Funkhouser figured a species purporting to illustrate this genus, and for this purpose he selected a species to which he gave the name *nigris*, a new name for Distant's MS name *majusculum*. Unfortunately, this species belongs to the genus *Anchon* and is quite unlike *Spalirises*. It was figured by me in my last paper (1953b) and described under the name of *Anchon regalis*, as I had not realised that it had been selected by Funkhouser to represent the genus *Spalirises*. However, it has since been compared with Distant's specimen and there is no doubt that it is the same species, so my name *Anchon regalis* becomes a synonym of *Anchon nigris* (Funkh.).

ACKNOWLEDGEMENTS.

I should like to express my thanks to Dr. P. Basilewsky of the Musée du Congo, Tervuren; Dr. Max Beier of the Naturhistorisches Museum, Vienna; Dr. A. Villiers of the Institut Français d'Afrique Noire, Dakar, and Mr. E. Pinhey of the Coryndon Museum, Nairobi, for the loan of specimens used in the preparation of this paper. I also wish to thank Mr. R. J. Izzard of the British Museum for his splendid co-operation and never failing help, particularly with the problem presented by Jacobi's *alticornis*.

PLATE IV Fig. 25.	<i>Centruchus solitarius</i> sp.n.		♂	Lateral view
26.	" " "		♂	Dorsal "
27.	" " "		♂	Frontal "
28.	<i>Anchonobelus aries</i> Jacobi		♀	Lateral "
29.	" " "		♀	Dorsal "
30.	" " "		♀	Frontal "
31.	<i>Distantobelus brunneus</i> (Funkh.)		nymph	Lateral "
32.				Frontal "
33.	<i>Distantobelus sericeus</i> (Capnr.)	"	♀	Lateral "
34.	<i>Spalirises alticornis</i> (Jacobi)		♀	Lateral "
35.	" "		♀	Frontal "
36.	" "		♀	Dorsal "
37.	" "		♂	Frontal "
38.	" "		♂	Lateral "
39.	" "		♂	Dorsal "

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